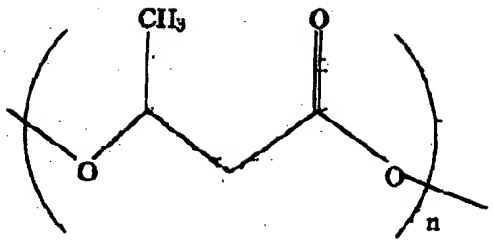

formula 1

said process comprising the steps of:

(a) growing a culture of *Bacillus mycoides* RLJ B-017 bacteria on a growth medium comprising a carbon source selected from the group consisting of sucrose, molasses and pineapple waste for a period of time sufficient to produce the polyhydroxybutyrate of formula 1;

(b) lysing the bacteria in the culture to release the polyhydroxybutyrate of formula 1; and

(c) isolating the polyhydroxybutyrate of formula 1.

a' Cont.

Claim ~~12~~ 2 (new) The process as claimed in claim ~~11~~ 1, wherein the culture is grown on the growth medium for a time period equal to or greater than twenty four hours.

Claim ~~13~~ 3 (new) The process as claimed in claim ~~12~~ 2, wherein the growth medium comprises sucrose.

Claim 14 (new) The process as claimed in claim 11, wherein said growth medium comprises (g l^{-1}): sucrose, 20; nutrient broth, 8; KH_2PO_4, 1.5; $(NH_4)_2SO_4$, 2.0; $Na_2HPO_4.12H_2O$, 2.239; $MgSO_4.7H_2O$, 0.2; $CaCl_2.2H_2O$, 0.02; $FeSO_4.7H_2O$, 0.01: and a trace-element solution, said trace element solution comprising (g l^{-1}): $ZnSO_4.7H_2O$, 0.2; H_3BO_3, 0.6; $MnCl_2.4H_2O$, 0.06; $CoCl_2.6H_20$, 0.4; $CuSO_4.4H_2O$, 0.02; $NaMoO_4.2H_2O$, 0.06; said growth medium having a pH of 7.2.

Claim 15 (new) The process as claimed in claim 12, wherein the growth medium comprises molasses.

Claim 16 (new) The process as claimed in claim 11, wherein said growth medium comprises (g-l^{-1}); molasses, 20; nutrient broth 8; KH_2PO_4, 1.5; $(NH_4)_2SO_4$, 2.0; $Na_2HPO_4.12H_2O$, 2.239; $MgSO_4.7H_2O$, 0.2; $CaCl_2.2H_2O$, 0.02; $FeSO_4.7H_2O$, 0.01; and a trace element solution, said trace element solution comprising (g l^{-1}): $ZnSO_4.7H_2O$, 0.2; H_3BO_3, 0.6; $MnCl_2.4H_2O$, 0.06; $CoCl_2.6H_20$, 0.4; $CuSO_4.4H_2O$, 0.02; $NaMoO_4.2H_2O$, 0.06, said growth medium having a pH of 7.2.

Claim 17 (new) The process as claimed in claim 12, wherein the growth medium comprises pineapple waste.

Claim 18 (new) The process as claimed in claim 11 wherein said growth medium comprises (gl $^{-1}$): pineapple waste, 20; nutrient broth, 8; KH_2PO_4, 1.5; $(NH_4)_2SO_4$, 2.0;

$NaHPO_4.12H_2O$, 2.239; $MgSO_4.7H_2O$, 0.2; $CaCl_2.2H_2O$, 0.02; $FeSO_4.MH_20$, 0.01; and a trace-element solution, said trace element solution comprising (gl^{-1}): $ZnSO_4.7H_2O$, 0.2; H_3BO_3, 0.6; $MnCl_2$. $4H_2O$, 0.06; $CoCl_2$. $6H_20$, 0.4; $CuSO_4.4H_2O$, 0.02; $NaMoO_4.2H_2O$, 0.06; said growth medium having a pH of 7.2.

Claim ~~19~~ 9 (new) The process as claimed in claim ~~12~~ 7, comprising pelletizing the isolated polyhydroxybutyrate of formula 1 to form a cell pellet and treating the cell pellet with an ionic reagent comprising a dispersion of a metal hypochlorite in a halogenated hydrocarbon solvent to agglomerate the polyhydroxybutyrate of formula 1.

Claims ~~20~~ 10 (new) The process as claimed in claim ~~19~~ 9, wherein the metal hypochlorite is selected from the group consisting of sodium hypochlorite and calcium hypochlorite.

a' Cont'

Claim ~~21~~ 11 (new) The process as claimed in claim ~~19~~ 9, wherein the halogenated hydrocarbon solvent comprises chloroform.

Claim ~~22~~ 12 (new) The process as claimed in claim ~~19~~ 9, wherein the concentration of said ionic reagent is in the range of one molar to one millimolar.

Claim ~~23~~ 13 (new) The process as claimed in claim ~~12~~ 7, wherein the polyhydroxybutyrate of formula 1 is isolated by centrifugation to obtain a plurality of separate phases,